

PD = 11/28/00

(FILE 'HOME' ENTERED AT 18:18:36 ON 02 SEP 2004)

FILE 'REGISTRY' ENTERED AT 18:18:50 ON 02 SEP 2004

L1 8 S LAGERSTROEMIA

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT, CAPLUS, CEN, DISSABS, DGENE, DRUGB, DRUGMONOG2, IMSDRUGNEWS, DRUGU, EMBAL, EMBASE, ESBIODASE, IFIPAT, IMSPRODUCT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF, MEDLINE, NAPRALERT, NLDB, ...' ENTERED AT 18:19:57 ON 02 SEP 2004

L2 306 S LAGERSTROEMIA SPECIOSA

L3 2 S CRAPE MYRTLE EXTRACT

L4 2984049 S SKIN OR HAIR

=> s l2 and l4

L5 9 L2 AND L4

=> dup rem

ENTER L# LIST OR (END):15

DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2, IMSPRODUCT, KOSMET, MEDICONF, NUTRACEUT, PCTGEN, PHARMAML'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

PROCESSING COMPLETED FOR L5

L6 8 DUP REM L5 (1 DUPLICATE REMOVED)

=> d l6 1-8 ibib, kwic

L6 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:823269 CAPLUS

DOCUMENT NUMBER: 139:311982

TITLE: **Skin**-lightening and moisturizing cosmetics containing plant extracts and pearl or nacreous shell

INVENTOR(S): Ueda, Kiyoshi; Shimomura, Kenji

PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003300822	A2	20031021	JP 2002-105232	20020408
PRIORITY APPLN. INFO.:			JP 2002-105232	20020408

TI **Skin**-lightening and moisturizing cosmetics containing plant extracts and pearl or nacreous shell

AB Title cosmetics contain (A) pearl or nacreous shell, (B) exts. of guava leaf, **Lagerstroemia speciosa** leaf, Ficus awkeotsang fruit, Hymenaea courbaril fruit **skin**, and/or Tamarix chinensis, and (C) optionally glycolic acid, ascorbic acid, its salts, and/or its derivs. Thus, a lotion containing pulverized pearl showed good **skin**-lightening, moisturizing, and gloss effect in women.

ST **skin** lightening moisturizing cosmetic plant ext; pear oyster shell glycolic acid ascorbate cosmetic; guava lagerstroemia Ficus Hymenaea Tamarix ext cosmetic

IT Tamarix chinensis

(extract; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)

IT Hymenaea courbaril

(fruit **skin**, extract; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)

- IT Ficus awkeotsang
(fruit, extract; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT Lagerstroemia speciosa
Psidium guajava
(leaf, extract; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT Cosmetics
(moisturizers; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT Pearl
(pulverized; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT Oyster
(shell, pulverized; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT Human
(**skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT Cosmetics
(**skin**-lightening; **skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)
- IT 50-81-7, Ascorbic acid, biological studies 50-81-7D, Ascorbic acid, glycoside 79-14-1, Glycolic acid, biological studies
RL: BSU (Biological study, unclassified); COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(**skin**-lightening and moisturizing cosmetics containing plant exts., pearl or nacreous shell, and optionally glycolic acid and/or ascorbic acids)

L6 ANSWER 2 OF 8 USPATFULL on STN
ACCESSION NUMBER: 2003:299955 USPATFULL
TITLE: Sugar decomposition inhibitor, digestive enzyme activity inhibitor, insulin secretion controller, and healthy food and beverage
INVENTOR(S): Suzuki, Yuko, Shizuoka, JAPAN
Hayashi, Kazuhiko, Shizuoka, JAPAN
Sakane, Iwao, Shizuoka, JAPAN
Kakuda, Takami, Shizuoka, JAPAN
PATENT ASSIGNEE(S): ITO EN, LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003211176	A1	20031113
APPLICATION INFO.:	US 2003-462334	A1	20030616 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-888448, filed on 26 Jun 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-194068	20000628
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC, 20037	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	

NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 742
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0004] Banaba (*Lagerstroemia speciosa* L. Pers.) belongs to the family Lythraceae in the order Myrtaceae and is a kind of Lagerstroemia distributed in the. . .

SUMM . . . of administering decoction of banaba dry leaves to normal domestic rabbits (F. Garcia: "On the hypoglycemic effect of decoction of *Lagerstroemia speciosa* (Banaba)" J. Philip. Med. Assoc. 20, 395 (1940)).

DETD . . . expect it demonstrating in treating and preventing the heart tract system diseases such as myocardial infarction, arteriosclerosis and hypertension, the **skin** system diseases such as blackheads, pimples and other disease inflammations which are caused by supernutrition. Moreover, banaba is free from. . .

DETD . . . in the present invention means each part of plant bodies of leaves, flowers, stems, xylem, roots and fruits obtained from *Lagerstroemia speciosa* L. Pers. which belongs to the family Lythraceae in the order Myrtaceae, or a mixture of at least two selected. . .

L6 ANSWER 3 OF 8 USPATFULL on STN DPLICATE 1
ACCESSION NUMBER: 2002:258388 USPATFULL
TITLE: Method for slowing the decomposition of a cosmetic composition
INVENTOR(S): Zimmerman, Amy C., Grand Rapids, MI, UNITED STATES
Harris, Ruth Elaine, Belmont, MI, UNITED STATES
PATENT ASSIGNEE(S): AMWAY CORPORATION (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 2002141955	A1	20021003
	US 6759033	B2	20040706
APPLICATION INFO.:	US 2001-46415	A1	20011025 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-599235, filed on 22 Jun 2000, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Linda D. Kennedy, BRINKS HOFER GILSON & LIONE, P.O. BOX 10395, CHICAGO, IL, 60610		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
LINE COUNT:	330		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cosmetic composition includes a carrier, a **skin**-whitening agent, and sodium magnesium silicate. The sodium magnesium silicate is present in an amount effective to slow decomposition of the composition. A method of slowing the decomposition of a cosmetic composition containing a **skin**-whitening agent includes adding an effective amount of a sodium magnesium silicate to the composition.

SUMM [0001] The present invention relates to a cosmetic composition for external use containing a carrier, a **skin**-whitening agent, and sodium magnesium silicate.

SUMM [0002] Certain **skin**-whitening agents in cosmetic compositions oxidize over time, causing the cosmetic composition to decompose. The decomposition causes the cosmetic composition to darken and to develop an intense, undesirable odor. Certain **skin**-whitening ingredients are known to be worse than others for premature oxidation. For example, magnesium ascorbyl phosphate and botanical whiteners such. . . these whitening agents tend to decompose, turn brown, and develop a foul odor. As a result, cosmetic compositions containing certain **skin**-whitening agents have very limited shelf lives.

SUMM [0003] Nevertheless, **skin**-whitening compositions are still in high demand, especially in Asian markets. For this reason, a method is

needed to slow the decomposition of **skin**-whitening compositions and the resulting darkening and foul odor of the **skin**-whitening compositions. Surprisingly, adding sodium magnesium silicate to **skin**-whitening compositions dramatically slows the darkening of these compositions as well as the development of the undesirable odor. Accordingly, cosmetic compositions that contain **skin**-whitening agents susceptible to oxidation have longer shelf lives if those cosmetic compositions also contain sodium magnesium silicate.

- SUMM . . . invention, a composition for topical use that has a melanin synthesis-inhibiting activity is provided. The composition comprises a carrier, a **skin**-whitening agent, and sodium magnesium silicate, wherein the sodium magnesium silicate is present in an amount effective to slow decomposition of. . .
- SUMM [0005] In another aspect of the invention, an improvement in a **skin**-whitening composition comprises an effective amount of sodium magnesium silicate to slow the decomposition of the composition.
- SUMM [0006] In still another aspect of the invention, a method of slowing the decomposition of a cosmetic composition containing a **skin**-whitening agent comprises adding an effective amount of a sodium magnesium silicate to the composition.
- DETD [0009] In accordance with the present invention, a **skin**-whitening cosmetic composition is provided that comprises a carrier, a **skin**-whitening agent, and sodium magnesium silicate. The present invention also concerns preventing the premature oxidation of **skin**-whitening agents in cosmetic compositions, which causes the compositions to brown and to develop an odor over time.
- DETD [0010] Certain **skin**-whitening agents are especially prone to premature oxidation. These **skin**-whitening agents include, but are not limited to, magnesium ascorbyl phosphate and botanical extracts such as bearberry extract, lemon extract, cucumber. . .
- DETD [0011] The cosmetic composition may contain other **skin**-whitening agents, whether or not those agents are prone to premature oxidation. Such **skin**-whitening agents may include all the known whitening agents and those that may be developed in the future. Although it is not possible to identify and list all known **skin**-whitening agents, the following **skin**-whitening agents may be included in the cosmetic composition of the present invention: tyrosinase inhibitors, free radical scavengers, chelating agents, and.
- DETD [0019] Other **skin**-whitening agents may include ginkgo extract, carob extract, rose fruit extract, geranium herb extract, Perilla extract, cinnamon extract, sweet marjoram extract, . . . Blanco, extracts of clove, alfalfa, Baliospermum montanum, Melia azadirachta, convolvulus arvensis, Gaiyo, Sansonin, Syuroyo, Seimkko, Soukyo, Taiso, Hakusempi, Woodfordia fructosa, **Lagerstroemia speciosa**, passiflorine, tepezcohite, amoule, Hobiyu, Baffalo Uri, Achote, Guayule, Adhatoda, Cymbopogon nardus, Desmodium gangeticum, Murraya koenigii, Smilax zeylanica, Gastrodia elata, Karukeija, . . .
- DETD [0020] Other **skin**-whitening agents may include teprenone, dihydroxy-isoquinoline, indomethacin, 3-hydroxymanule, vitamin K (such as vitamin K1-K7, its homologues, salts, and derivatives), thiazolidinone derivatives, . . .
- DETD [0021] The **skin**-whitening agent may be used in the cosmetic composition of the present invention in an amount of from about 0.001% to about 99%. Preferably, the **skin**-whitening agent is present in the composition in an amount of from about 0.01% to about 20%. More preferably, the amount. . .
- DETD . . . Surprisingly, sodium magnesium silicate has the unexpected and beneficial effect of reducing the time and temperature-induced darkening effect of the **skin**-whitening agent in the cosmetic composition. In other words, sodium magnesium silicate prevents the premature darkening of the cosmetic composition. The results are especially impressive when the cosmetic composition includes

skin-whitening agents prone to oxidation such as magnesium ascorbyl phosphate and botanical extracts.

DETD . . . silicate also improves the odor of the composition by reducing the time and temperature-induced development of foul odors as the **skin**-whitening agents oxidize. In other words, sodium magnesium silicate prevents the premature development of a foul odor. The results are especially impressive when the cosmetic composition includes **skin**-whitening agents prone to oxidation such as magnesium ascorbyl phosphate and botanical extracts.

DETD . . . UV absorbers, fragrances, preservatives, thickeners, pH adjusters, etc, so long as they do not interfere with the function of the **skin**-whitening agent and the sodium magnesium silicate.

DETD [0038] Based on the above results, the addition of magnesium ascorbyl phosphate to a cosmetic composition containing a **skin**-whitening agent prone to premature oxidation will extend the shelf life of that cosmetic composition. Magnesium ascorbyl phosphate may extend the.

CLM What is claimed is:

1. A composition for topical use that has a melanin synthesis-inhibiting activity, the composition comprising a carrier, a **skin**-whitening agent, and sodium magnesium silicate, wherein the sodium magnesium silicate is present in an amount effective to slow decomposition of.

3. The composition of claim 1 wherein the **skin**-whitening agent is selected from the group consisting of tyrosinase inhibitors, free radical scavengers, chelating agents, and mixtures thereof.

4. The composition of claim 1 wherein the **skin**-whitening agent is selected from the group consisting of bearberry extract, lemon extract, cucumber extract, mulberry extract, licorice extract, lactic acid, . . .

7. The composition of claim 1 wherein the composition comprises from about 0.01% to about 20% by weight of **skin**-whitening agent.

8. The composition of claim 1 wherein the composition comprises from about 0. 1% to about 10% by weight of **skin**-whitening agent.

12. In a **skin**-whitening composition comprising a carrier and a **skin**-whitening agent, the improvement comprising an effective amount of sodium magnesium silicate to slow the decomposition of the composition.

13. A method of slowing the decomposition of a cosmetic composition containing a **skin**-whitening agent, the method comprising adding an effective amount of a sodium magnesium silicate to the composition.

14. The method of claim 13 wherein the composition comprises from about 0.001% to about 99% by weight of a **skin**-whitening agent.

16. The method of claim 13 wherein the **skin**-whitening agent is selected from the group consisting of tyrosinase inhibitors, free radical scavengers, chelating agents and mixtures thereof.

18. The method of claim 13 wherein the **skin**-whitening agent is selected from the group consisting of bearberry extract, lactic acid, acerola fermentate, magnesium ascorbyl phosphate, and mixtures thereof.

L6 ANSWER 4 OF 8 USPATFULL on STN

ACCESSION NUMBER: 2002:31997 USPATFULL

TITLE: Sugar decomposition inhibitor, digestive enzyme activity inhibitor, insulin secretion controller, and healthy food and beverage

INVENTOR(S): Suzuki, Yuko, Shizuoka, JAPAN
Hayashi, Kazuhiko, Shizuoka, JAPAN
Sakane, Iwao, Shizuoka, JAPAN
Kakuda, Takami, Shizuoka, JAPAN
PATENT ASSIGNEE(S): ITO EN, LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002018818	A1	20020214
APPLICATION INFO.:	US 2001-888448	A1	20010626 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-194068	20000628
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, DC, 20037-3213	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	744	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0004] Banaba (**Lagerstroemia speciosa** L. Pers.)
belongs to the family Lythraceae in the order Myrtaceae and is a kind of
Lagerstroemia distributed in the. . .
SUMM . . . of administering decoction of banaba dry leaves to normal
domestic rabbits (F. Garcia: `On the hypoglycemic effect of decoction of
Lagerstroemia speciosa (Banaba)` J. Philip. Med.
Assoc. 20, 395 (1940)).
DETD . . . expect it demonstrating in treating and preventing the heart
tract system diseases such as myocardial infarction, arteriosclerosis
and hypertension, the **skin** system diseases such as blackheads,
pimples and other disease inflammations which are caused by
supernutrition. Moreover, banaba is free from. . .
DETD . . . in the present invention means each part of plant bodies of
leaves, flowers, stems, xylem, roots and fruits obtained from
Lagerstroemia speciosa L. Pers. which belongs to the
family Lythraceae in the order Myrtaceae, or a mixture of at least two
selected. . .

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:823303 CAPLUS
DOCUMENT NUMBER: 135:348755
TITLE: **Skin** compositions containing conchiolin
hydrolyzates and plant extracts
INVENTOR(S): Shimomura, Kenji; Hattori, Fumihiro
PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001316239	A2	20011113	JP 2000-136952	20000510
PRIORITY APPLN. INFO.:			JP 2000-136952	20000510
TI	Skin compositions containing conchiolin hydrolyzates and plant extracts			
AB	The invention relates to a skin composition having skin -lightening and rough skin -improving effects, wherein the composition contains conchiolin hydrolyzate or reaction product of conchiolin			

hydrolyzate with succinic acid anhydride, and at least one plant extract. The plant extract is selected from a group consisting of *Ficus awkeotsang*, *Trapa natans*, *Rhodiolarosea*, *Hymenaea courbaril*, *Pyrrosia lingua*, *Machilus thunbergii* bark, *Machilus japonica* bark, *Agrimonia eupatoria*, *Mucuna birdwoodiana* stem, *Millettia nitida* stem, *Millettia dielsiana* stem, *Mucuna birdwoodiana* stem, *Millettia nitida* stem, *Millettia dielsiana* stem, *Rheum officinale*, animal glue, *Quercus stenophylla* leaves, *Fritillaria thunbergii*, *Fraxinus* bark, *Saraca indica* bark, *Mimusops elengi* leaves and bark, *Eugenia jambolana* bark, *Eugenia caryophyllata*, *Syzygium aromaticum*, *Carthamus tinctorius* blossom, *Sophora flavescens* root, *Sophora flavescens* root, *Psidium guajava*, *Cudrania cochinchinensis* root, *Tamarix chinensis* shoot, *Adhatoda vasica*, *Lagerstroemia speciosa* leaves, *Woodfordia fruticosa* blossom, *Azadirachta indica* bark, *Phyllanthus niruri*, *Cymbopogon nardus* root stem, *Desmodium gangeticum*, *Cardiospermum halicacabum*, *Murraya koenigii* stem, *Smilax zeylanica* root, *Vetiveria zizanioides* root, *Hemidesmus indicus* root, *Piper longum* root, *Piper chaba* root, *Tinospora cordifolia* branch, *Michelia champaca* blossom, *Melaleuca leucadendron* bark, *Sphaeranthus indicus*, *Mangifera quadrifida*, *Aspalathus linealis* leaves, *Aspalathus cedarbergensis* leaves, *Quisqualis indica* fruit, *Cassia* seed, and *Cassia nomame*.

- ST conchiolin hydrolyzate plant ext **skin** cosmetic
- IT Ash (*Fraxinus*)
 Cajuput (*Melaleuca leucadendron*)
 Java plum (*Syzygium cumini*)
Machilus japonica
Machilus thunbergii
 Margosa (*Melia azadirachta*)
Saraca indica
 (bark, exts.; **skin** compns. containing conchiolin hydrolyzates and plant exts.)
- IT Champac (*Michelia champaca*)
 Safflower (*Carthamus tinctorius*)
Woodfordia fruticosa
 (blossom, exts.; **skin** compns. containing conchiolin hydrolyzates and plant exts.)
- IT *Tinospora cordifolia*
 (branch, exts.; **skin** compns. containing conchiolin hydrolyzates and plant exts.)
- IT Protein hydrolyzates
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (conchiolin hydrolyzates; **skin** compns. containing conchiolin hydrolyzates or their reaction products with succinic acid anhydride, and plant exts.)
- IT Albuminoids
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (conchiolins, hydrolyzates; **skin** compns. containing conchiolin hydrolyzates or their reaction products with succinic acid anhydride, and plant exts.)
- IT Cosmetics
 (creams; **skin** compns. containing conchiolin hydrolyzates and plant exts.)
- IT Agrimony (*Agrimonia eupatoria*)
Cardiospermum halicacabum
 Clove (*Syzygium aromaticum*)
Desmodium gangeticum
Ficus awkeotsang
Fritillaria verticillata thunbergii
 Guava (*Psidium guajava*)
Hymenaea courbaril
 Malabar nut (*Justicia adhatoda*)
Mangifera quadrifida
Phyllanthus niruri

Pyrrosia lingua
 Rhubarb (Rheum officinale)
 Sedum roseum
 Senna (Cassia nomame)
 Sphaeranthus indicus
 Trapa natans
 (exts.; **skin** compns. containing conchiolin hydrolyzates and plant
 exts.)
 IT Quisqualis indica
 (fruit, exts.; **skin** compns. containing conchiolin hydrolyzates
 and plant exts.)
 IT Mimulus elengi
 (leaves and bark, exts.; **skin** compns. containing conchiolin
 hydrolyzates and plant exts.)
 IT Aspalathus cedarbergensis
 Aspalathus linearis
Lagerstroemia speciosa
 Oak (Quercus salicina)
 (leaves, exts.; **skin** compns. containing conchiolin hydrolyzates
 and plant exts.)
 IT Cosmetics
 (lotions; **skin** compns. containing conchiolin hydrolyzates and
 plant exts.)
 IT Cymbopogon nardus
 (root stem, exts.; **skin** compns. containing conchiolin
 hydrolyzates and plant exts.)
 IT Cudrania cochinchinensis
 Hemidesmus indicus
 Pepper (Piper chaba)
 Pepper (Piper longum)
 Smilax zeylanica
 Sophora flavescens
 (root, exts.; **skin** compns. containing conchiolin hydrolyzates and
 plant exts.)
 IT Senna (Cassia)
 (seed, exts.; **skin** compns. containing conchiolin hydrolyzates and
 plant exts.)
 IT Tamarix chinensis
 (shoot, exts.; **skin** compns. containing conchiolin hydrolyzates
 and plant exts.)
 IT Glues
 (**skin** compns. containing conchiolin hydrolyzates and plant exts.)
 IT Millettia dielsiana
 Millettia nitida
 Mucuna birdwoodiana
 Murraya koenigii
 (stem, exts.; **skin** compns. containing conchiolin hydrolyzates and
 plant exts.)
 IT 108-30-5DP, Succinic acid anhydride, reaction products with conchiolin
 hydrolyzates
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (**skin** compns. containing conchiolin hydrolyzates and plant exts.)

L6 ANSWER 6 OF 8 USPATFULL on STN

ACCESSION NUMBER: 1999:141311 USPATFULL

TITLE: **Skin** whitening composition containing
 bearberry extract and a reducing agent

INVENTOR(S): Leverett, Jesse C., Rockford, MI, United States
 Dornoff, Jeffrey M., Grand Rapids, MI, United States

PATENT ASSIGNEE(S): Amway Corporation, MI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5980904 19991109
APPLICATION INFO.: US 1998-195577 19981118 (9)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lilling, Herbert J.
LEGAL REPRESENTATIVE: Brinks Hofer Gilson & Lione, Nichols, G. Peter
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
PAGE COUNT: 496

AS INDEXING IS AVAILABLE FOR THIS PATENT.

Skin whitening composition containing bearberry extract and a reducing agent

A **skin**-whitening composition that includes bearberry extract and a reducing agent. The composition can be topically applied to the human **skin** and can include one or more whitening agents in combination with bearberry extract and the reducing agent to achieve an enhanced whitening effect. A method of whitening human **skin** includes topically applying to the **skin** a composition containing bearberry extract and a reducing agent in an amount and for a period of time sufficient to visibly whiten the **skin**. The method includes incorporating bearberry extract and the reducing agent with known whitening agents and applying to the **skin** in an amount and for a period of time sufficient to visibly whiten the **skin**.

The present invention relates to a **skin**-whitening composition for external use containing bearberry extract and a reducing agent and to a method of whitening **skin** by topically applying a composition containing an effective amount of bearberry extract and a reducing agent.

Skin color is primarily determined by the amount of melanin present in the **skin**. Thus, in recent years, cosmetic compositions have been developed to reduce the amount of melanin in the **skin** and therefore, whiten the **skin**. These development efforts have focused on whitening agents that inhibit the function and activity of tyrosinase, which plays an important.

Despite the efficacy of the above compounds in producing whiter **skin**, alternatives that are more effective are continually being sought. It has now found that **skin**-whitening compositions that contain bearberry can be improved by adding a reducing agent such as a formaldehyde-donating compound to the composition.

. . . composition of certain amino acids, of which several are key to the process of melanin production. As a result, increased **skin** whitening efficacy is obtained.

. . . extract and a reducing agent, are suitable for external application, and prevent or inhibit the formation of melanin in the **skin** and thus whiten the **skin**. Another object is to enhance and accelerate the development of the whitening and beautifying effect exhibited by bearberry extract by.

The present invention also includes a method of whitening the **skin** that comprises topically applying to the **skin** a composition containing bearberry extract and an effective amount of a reducing agent for a period of time sufficient to visibly whiten the **skin**. In a preferred embodiment, the reducing agent is a formaldehyde-donating compound. The term formaldehyde-donating compound refers to those compounds that.

. . . bearberry extract combined with the reducing agent acts as a whitening agent. Other whitening agents can be included in the **skin**-whitening composition. Examples of such agents include tyrosinase inhibitors, free radical scavengers, and mixtures thereof. Some tyrosinase inhibitors include, but are.

In accordance with the present invention, a **skin**-whitening composition is provided that comprises bearberry extract and a reducing agent as active ingredients.

It is believed that a **skin**-whitening composition containing

bearberry extract can achieve a higher efficacy of whitening **skin** if complemented by a reducing agent according to the present invention. As a result, a higher degree of **skin**-whitening activity can be achieved with a lower level of the bearberry extract.

MM . . . a composition containing bearberry extract and a reducing agent according to the present invention may exhibit synergism by enhancing the **skin** whitening effect of the known **skin** whiteners. This effect may be further augmented by the addition of one or more substances having a known whitening effect.

MM . . . Blanco, extracts of clove, alfalfa, Baliospermum montanum, Melia azadirachta, convolvulus arvensis, Gaiyo, Sansonin, Syuroyo, Seimkko, Soukyo, Taizo, Hakusempi, Woodfordia fructosa, Lagerstroemia speciosa, passiflorine, tepezcohite, amoule, Hobiyu, Buffalo Uri, Achote, Guayule, Adhatoda, Cymbopogon nardus, Desmodium gangeticum, Murraya koenigii, Smilax zeylanica, Gastrodia elata, Karukeija, . . .

MM . . . regard, it is believed that the mercaptodextrans having a molecular weight less than about 100,000 may be more effective for **skin** whitening than those having a molecular weight greater than about 100,000. Consequently, it is preferred to use a mercaptodextran having. . .

MM . . . titanium dioxide and organic sunscreens such as p-aminobenzoic acid and esters thereof, ethylhexyl p-methoxycinnamate, 2-ethoxyethyl p-methoxycinnamate and butyl methoxydibenzoylmethane; and **skin** benefit agents, such as retinoic acid, retinol, retinol esters; anti-inflammatory agents, such as salicylic acid; and mixtures thereof. **Skin** permeation ingredients such as α - and β -hydroxy acids may also be included. Mollifying agents such as lipids, ceramides, sphingosines, sphingolipids, . . . or more substances in the formulations. In addition, they may aid in preserving and repairing the barrier function of the **skin**. The mollifying agents may be combined with sterols, such as cholesterol and cholesterol sulfate, and fatty acids, particularly those that may be found in the **skin** and **hair** such as the C.sub.10 -C.sub.30 fatty acids.

MM In another aspect of the composition of the present invention, there is provided a bearberry-containing **skin** whitening composition, wherein the improvement comprises adding an effective amount of a reducing agent to increase the **skin**-whitening efficacy of the bearberry extract. The reducing agent includes the formaldehyde compounds described above.

MM . . . comprises bearberry extract and a reducing agent, wherein the reducing agent is present in an amount effective to increase the **skin**-whitening efficacy of the bearberry extract. Again, the reducing agent includes the formaldehyde compounds described above. MM The present invention also contemplates a method of visibly whitening human **skin** comprising applying to the **skin** a composition containing bearberry extract and an effective amount of a reducing agent wherein the composition is applied in an amount and for a period of time sufficient to visibly whiten the **skin**. Preferably, the method comprises topically applying to the **skin** a composition comprising bearberry extract, a reducing agent, and a pharmaceutically acceptable carrier or a cosmetically acceptable carrier.

MM The present invention also contemplates a method of increasing the **skin**-whitening efficacy of a **skin**-whitening composition containing bearberry extract, the method comprising adding an effective amount of a reducing agent. The composition is applied in an amount and for a period of time sufficient to visibly whiten the **skin**.

MM To demonstrate the effectiveness of a **skin** whitening composition containing bearberry extract and a reducing agent according to the present invention, the following test was conducted.

DETD Two **skin** whiteners that contained 2.00% of bearberry extract were applied to a petri dish containing cultured melanocytes for 48 h. One **skin** whitener contained the 0.30% of the reducing agent diazolidinyl urea, and the other did not. When viewed with the eye, the sample to which **skin** whitener that contained the reducing agent was applied surprisingly appeared whiter as compared to the sample to which **skin** whitener that did not contain the reducing agent.

CLM What is claimed is:

. . . comprising bearberry extract and a reducing agent, wherein the reducing agent is present in an amount effective to increase the **skin**-whitening efficacy of the bearberry extract and the bearberry extract is from Arctostaphylos uva-ursi and is a glycolic extract standardized to. . .

7. The composition of claim 1 further comprising a **skin** -whitening agent selected from the group of tyrosinase inhibitors, free radical scavengers, chelating agents and mixtures thereof.

9. In a **skin**-whitening composition containing bearberry extract from Arctostaphylos uva-ursi and is a glycolic extract standardized to >50 tyrosinase inhibition units per milliliter, the improvement comprising an amount of a reducing agent effective to increase the **skin**-whitening efficacy of the bearberry extract.

10. A method of visibly whitening human **skin** comprising applying on the **skin** a composition containing bearberry extract from Arctostaphylos uva-ursi and is a glycolic extract standardized to >50 tyrosinase inhibition units per. . . agent, whereby the composition is applied in an amount and for a period of time sufficient to visibly whiten the **skin**.

15. A method of increasing the **skin**-whitening efficacy of a **skin**-whitening composition containing bearberry extract from Arctostaphylos uva-ursi and is a glycolic extract standardized to >50 tysoniase inhibition units per milliliter,. . .

L6 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:769924 CAPLUS

DOCUMENT NUMBER: 123:152599

TITLE: **Skin**-lightening cosmetics containing cholesteric liquid crystals and plant extracts

INVENTOR(S): Ueda, Kyosuke; Shimomura, Kenji

PATENT ASSIGNEE(S): Mikimoto Seiyaku Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho; 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07157420	A2	19950620	JP 1993-342164	19931201
PRIORITY APPLN. INFO.:			JP 1993-342164	19931201
TI	Skin -lightening cosmetics containing cholesteric liquid crystals and plant extracts			
AB	Skin -lightening cosmetics contain cholesteric liquid crystals and exts. of plants such as Adhatoda vasica. A cosmetic composition contained cholesteryl 12-hydroxystearate 3.0, cholesteryl heptanoate 3.0, cholesteryl oleate 2.0, cholesteryl butyrate 1.0, A. vasica extract 1.0, neutralized 1% carboxyvinyl polymer 1.0, 1,3-butylene glycol 7.0, and preservatives 0.1 weight parts. The compns. showed moisturizing, antioxidant, and hyarulonidase-inhibiting activities.			
ST	skin lightening cosmetic cholesteric liq crystal; plant ext liq			

crystal cosmetic

IT Cajuput
Cardiospermum halicacabum
Champac
Cymbopogon nardus
Desmodium gangeticum
Hemidesmus indicus
 Lagerstroemia speciosa
Malabar nut
Margosa
Murraya koenigii
Plant
Smilax zeylanica
Sphaeranthus indicus
Tinospora cordifolia
Woodfordia fruticosa
 (skin-lightening cosmetics containing cholesteric liquid crystals
 and plant exts.)

IT Pepper (Piper)
 (P. chaba, skin-lightening cosmetics containing cholesteric liquid
 crystals and plant exts.)

IT Pepper (Piper)
 (P. longum, skin-lightening cosmetics containing cholesteric liquid
 crystals and plant exts.)

IT Liquid crystals
 (cholesteric, skin-lightening cosmetics containing cholesteric
 liquid crystals and plant exts.)

IT Cosmetics
 (skin-lightening, skin-lightening cosmetics containing
 cholesteric liquid crystals and plant exts.)

IT 303-43-5, Cholesteryl oleate 521-13-1, Cholesteryl butyrate 1182-07-6,
Cholesteryl heptanoate 40445-72-5, Cholesteryl 12-hydroxystearate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BUU (Biological use, unclassified); BIOL (Biological
study); USES (Uses)
 (skin-lightening cosmetics containing cholesteric liquid crystals
 and plant exts.)

L6 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:741106 CAPLUS

DOCUMENT NUMBER: 123:122732

TITLE: hair tonics containing 5 α -reductase
inhibitor from plants

INVENTOR(S): Nanba, Tsuneo; Hatsutori, Yukio; Shimomura, Kenji;
Yamabe, Yukihisa; Iida, Koichi

PATENT ASSIGNEE(S): Mikimoto Seiyaku KK, Japan; Mikimoto Pharmaceutical
Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07138135	A2	19950530	JP 1993-288451	19931117
JP 3487619	B2	20040119		
PRIORITY APPLN. INFO.:			JP 1993-288451	19931117
TI	hair tonics containing 5 α -reductase inhibitor from plants			
AB	Hair tonics contain 5 α -reductase inhibitor from plants (such as Smilax zeylanica and Phyllanthus niruri): A lotion contained olive oil 0.5, the plant extract 0.5, polyoxyethylene sorbitan monostearate 2.0, ethoylated castor oil 2.0, ethanol 30.0, 1% Na hyarulonate 5.0, and			

purified water 60.0%. The preps. were highly effective.

ST **hair** tonic reductase inhibitor plant

IT Cymbopogon nardus

Lagerstroemia speciosa

Phyllanthus niruri

Plant

Smilax zeylanica

Woodfordia fruticosa

(**hair** tonics containing 5 α -reductase inhibitor from plants)

IT **Hair** preparations

(growth stimulants, **hair** tonics containing 5 α -reductase inhibitor from plants)

IT **Hair** preparations

(tonics, **hair** tonics containing 5 α -reductase inhibitor from plants)

IT 9081-34-9, 5 α -Reductase

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (inhibitors; **hair** tonics containing 5 α -reductase inhibitor from plants)